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REMARKS

Claims 1-30 of the application stand rejected. Claims 1, 2, 5, 12, 16, 17, 22, 23, 24 and 29 have been amended herein to more clearly define the scope of the presently claimed invention. Applicants respectfully request reconsideration of pending Claims 1-30 in light of the amendments and remarks herein.

_35 U.S.C. § 102_

Claims 1-3, 6, 9-12, 14, 16-18, 20-22, 23-25 and 27-29 stand rejected under 35 U.S.C. § 102 as anticipated by U.S. Patent No. 6,059,839 ("Dehnert"). The Examiner submits that Dehnert discloses all the elements of independent Claims 1, 16 and and 23. Applicants respectfully traverse the Examiner's rejections.

Dehnert describes an apparatus and method for compiler identification of address data (Dehnert, Title). The Examiner suggests that the Intermediate Representation File (IRF) disclosed in Cols. 5 and 6 of Dehnert teaches the element of "a memory disambiguation token for each memory reference, each memory disambiguation token identifying information particular to the memory reference it is associated with". Additionally, the Examiner suggests that the IRF contains various information which corresponds to the claimed element of "creating a symbolic memory reference representation associated with each memory disambiguation token". Applicants respectfully disagree.

First, Applicants respectfully submit that the IRF disclosed in Dehnert does not describe the memory disambiguation token claimed in independent Claims 1, 16 and 23. The Examiner essentially suggests that the memory disambiguation token may be viewed as a file, and that the file is similar to the IRF in Dehnert. Applicants strongly disagree. As described in Dehnert, the IRF includes various "variables" and data about the variables (see e.g., Dehnert, Col. 6, lines 20-23). The Examiner appears to conclude, without any support, that the variables in the IRF in Dehnert are similar to the memory references claimed in independent Claims 1, 16 and 23. Applicants respectfully submit that there is no basis for such a conclusion, and more importantly, that such a conclusion is erroneous. It is well known to those of ordinary skill in the art that variables typically refer to "memory locations". Thus, when Denhert describes an IRF that includes "data gathered about the variables", it is likely referring to gathering data pertaining to

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memory locations. This interpretation is supported by Dehnert, which describes the data gathered in the IRF as including information on the variables such as variable address taken information and whether they are flagged as direct modification, direct use, indirect modification or indirect use (Dehnert, Col. 6, lines 22-25).

In contrast to variables in a file, the memory disambiguation token claimed herein includes information particular to a *memory reference*. More specifically, as claimed, the memory disambiguation token identifies information particular to the *memory reference* it is associated with so as to preserve high-level and intermediate-level semantic information. In other words, as described in the specification, each memory reference may have a disambiguation token associated with it, and the disambiguation token may provide access to all the information (either directly or through other links) necessary to perform memory disambiguation. Examples of disambiguation tokens include, but are not limited to, a data structure embedded in the memory reference operators of the intermediate language (IL) or a separate data structure linked to the memory reference operator via a pointer or hash table lookup (Specification, Pages 5-6). Disambiguation tokens, as claimed herein are therefore distinctly different than the IRF files disclosed in Dehnert. There is no other reference in Dehnert to suggest a memory disambiguation token, as claimed. Applicants therefore respectfully submit that Dehnert does not teach at least this element of independent Claims 1, 16 and 23 (and all claims dependant on those independent claims. As a result, Applicants hereby request the Examiner to withdraw the 35 U.S.C. § 102 rejections to Claims 1-3, 6, 9-12, 14, 16-18, 20-22, 23-25 and 27-29.

35 U.S.C. §103

Claims 4, 5, 7, 13, 15 and 30 stand rejected under 35 U.S.C. §103 as being unpatentable over the combination of Dehnert in view of "A Simple Mechanism for Improving the Accuracy and Efficiency of Instruction-Level Disambiguation" ("Novak"). Again, Applicants respectfully traverses the Examiner's rejection.

Applicants respectfully submit that Claims 4, 5, 7, 13, 15 and 30 and dependant on independent Claims 1, 16 and 23. As described above, Dehnert does not teach at least one element of the independent claims. Thus, without conceding the propriety of combining Dehnert with Novak, Applicants respectfully submit that the combination of Dehnert and Novak do not

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render Claims 4, 5, 7, 13 and 30 unpatentable. Novak does not teach a memory disambiguation token, as claimed herein. Since also Dehnert does not teach or suggest a memory disambiguation token (as described in detail above), the addition of Novak to Dehnert does not overcome the shortcomings of Dehnert. In other words Dehnert, alone or in combination with Novak does not teach a memory disambiguation token, as claimed herein. Applicants therefore respectfully submit that since neither Dehnert and/or Novak, alone or in combination, teaches at least this element of the independent claims, these references cannot render the independent claims unpatentable. Similarly, for at least this reason, the references cannot render all claims dependant on these independent claims unpatentable. Applicant therefore respectfully requests the Examiner to withdraw the rejection to Claims 14, 5, 7, 13, 15 and 30 under 35 U.S.C. §103.

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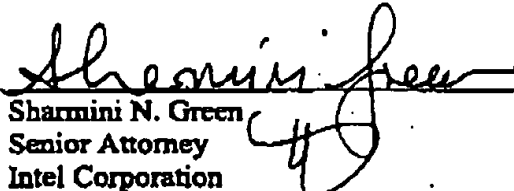42390P10809   PATENT

CONCLUSION

Based on the foregoing, Applicants respectfully submit that the applicable objections and rejections have been overcome and that pending Claims 1-30 are in condition for allowance. Applicants therefore respectfully request an early issuance of a Notice of Allowance in this case. If the Examiner has any questions, the Examiner is invited to contact the undersigned at (310) 406-2362.

If there are any additional charges, please charge Deposit Account No. 50-0221.

Respectfully submitted,

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